

ORDINANCE #06-02

AN ORDINANCE OF THE MAYOR AND COUNCIL OF THE CITY OF SURPRISE, ARIZONA, AMENDING THE INTERNATIONAL BUILDING CODE 2003, INTERNATIONAL RESIDENTIAL CODE 2003, INTERNATIONAL MECHANICAL CODE 2003, INTERNATIONAL ELECTRIC CODE 2003, INTERNATIONAL PROPERTY MAINTENANCE CODE 2003 AND INTERNATIONAL FIRE CODE 2003 AND DECLARING THE AMENDMENTS TO BE A PUBLIC RECORD.

WHEREAS, the City has adopted the International Building Code 2003, International Residential Code 2003, International Mechanical Code 2003, International Electric Code 2003, International Property Maintenance Code 2003 and International Fire Code 2003 pursuant to Ordinance #04-26, and;

WHEREAS, City staff has reviewed these International Codes and has recommended the following amendments, and;

WHEREAS, Arizona Revised Statutes §9-802 allows a municipality to enact the provisions of a code or public record by reference without having to publish the entire code or public record and allows the municipality to make amendments to the codes or public records adopted by reference by the same manner;

NOW, THEREFORE, BE IT ORDAINED by the Mayor and City Council of the City of Surprise that:

Section 1. The following codes and appendices as published by the International Code Council, 2003 edition, and the amendments to those codes, as contained in this Ordinance #06-02, are hereby declared to be public records by this Ordinance #06-02. At least three (3) copies of each shall be filed in the City Clerk's office and kept available for public use and inspection.

- A. International Building Code
- B. International Residential Code
- C. International Electrical Code
- D. International Mechanical Code
- E. International Property Maintenance Code
- F. International Fire Code

Section 8. The International Fire Code, 2003 Edition is hereby amended as follows:

- 1. The following Appendices of the International Fire Code, 2003 Edition, are hereby adopted in their entirety.
 - a. Appendix B - Fire-Flow Requirements for Buildings

- b. Appendix C - Fire Hydrant Location and Distribution
- c. Appendix D - Fire Apparatus Access Roads
- d. Appendix E - Hazard Categories
- e. Appendix F - Hazard Ranking
- f. Appendix G - Cryogenic Fluids, Weight and Volume Equivalents

2. **Chapter 1 ADMINISTRATION**

- a. Section 101.1, delete and replace with the following language:

101.1 Title. This code shall be known as the City of Surprise Fire Code, and may be cited as such and will be referred to herein as “this code.”

- b. Section 102.3, delete and replace with the following language:

102.3 Change of use or occupancy. No change shall be made in the use or occupancy of any structure that would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless made to comply with the requirements of this code and the international building code. Subject to the approval of the Fire Chief, the use or occupancy of an existing structure shall be permitted to be changed and the structure allowed to be occupied for purposes in other groups without conforming to all the requirements of this code and the international building code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use. All changes of occupancy shall be coordinated with the Fire Marshal prior to issuance of a temporary or permanent certificate of occupancy. All references to the International Existing Building Code are hereby deleted.

- c. Section 102.4, delete and replace with the following language:

102.4 Application of building code. The design and construction of new structures shall comply with the International Building Code; and any alterations, additions, changes in use or changes in structures required by this code, which are within the scope of the International Building Code, shall be made in accordance therewith.

- d. Section 102.5, delete and replace with the following language:

102.5 Historic buildings. The provisions of this code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings and structures shall be provided in accordance with an

approved fire protection plan.

- e. Section 102.8.1 Add the follow language:

102.8.1 Re-submittals. When resubmitting plans for review, the revised plans shall be submitted in accordance the Arizona State Board of Technical Registration. In addition, the revised plans shall include the revision date; each revision shall be indicated by a clouded area and a delta. A response letter addressing each item on the revision shall accompany the re-submittal.

- f. Section 102.9, delete and replace with the following language:

102.9 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where this code conflicts with any Surprise Municipal Code provision or other provisions of local law, the more restrictive shall apply.

- g. Section 104.6, delete and replace with the following language:

104.6 Official records. The fire department shall keep official records as required by Sections 104.6.1 through 104.6.4. Such official records shall be retained for not less than the time period established in the Fire Chief's records retention schedule.

- h. Section 104.8, add the following language as a second paragraph:

Requests for a modification of code requirements shall be made in writing on a form provided by the Fire Department. The applicant is responsible for providing all information, calculations and other data necessary to substantiate each request for a modification. The Fire Chief shall approve, approve with stipulations or deny such application, based upon the substantiating data submitted and the Fire Chief's determination that the modification does or does not result in substantial compliance with the intent of the code. In deciding each case, the Fire Chief may consider or require alternative methods or systems to be used in compensation for the particular code provision to be modified.

- i. Section 104.10, delete and replace with the following language:

104.10 Investigations. The Fire Department shall investigate or cause to be investigated the cause, origin and circumstance of each and every fire occurring in the jurisdiction involving loss of life or injury to a person or destruction or damage to property, and if it appears to the Fire Investigator that such fire is of suspicious origin, the Fire Investigator shall notify the appropriate law enforcement agency and shall secure the site until the law

enforcement agency takes control of the site. Then, the Fire Investigator shall continue to pursue the investigation to its conclusion. Information that could be related to trade secrets or processes shall not be made part of the public record unless directed by a court of law.

- j. Section 104.10.1, delete and replace with the following language:

104.10.1 Police Department. It shall be the duty of the Police Department, at the time of any fire, to place ropes or guards across all streets, lanes or alleys on which shall be situated any building on fire, and at such other points as are deemed expedient and necessary. Any person entering within the line indicated by such ropes or guards and refusing to go outside such lines when directed to do so by any police officer or officer of the Fire Chief shall be guilty of a class one misdemeanor.

- k. Section 104.12 is hereby added and shall read as follows:

104.12 Fees. The Fire Chief shall be permitted to reduce or waive any and all fire related fees for permits, plan reviews, inspections and operational services, which are established from time to time by resolution of the City Council, for just cause on the basis of a case-by-case review of the circumstances surrounding a request for fee reduction or fee waiver, provided to the Fire Chief in writing.

- l. Section 104.12.1. is hereby added and shall read as follows:

104.12.1 Payment of fees. A permit shall not be valid until the fees have been paid. Nor shall an amendment or extension of a permit be valid until the additional fees, if any, have been paid.

Every permit shall become invalid unless the work authorized by the permit is commenced, inspections are conducted and approval issued by the Fire Chief within 180 days after issuance of the permit.

- m. Section 104.12.2 is hereby added and shall read as follows:

104.12.2 Refunds. The Fire Chief shall be permitted to authorize refunding of a fee paid hereunder, which was erroneously paid or collected. The Fire Chief shall be permitted to authorize refunding of not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code. The Fire Chief shall be permitted to authorize refunding of not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any examination or administration time has been expended. The Fire Chief shall be authorized to waive the plan review fee for an expired permit for which no additional plan review is required.

The Fire Chief shall not be permitted to authorize refunding of any permit fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

- n. Section 105.1.1, add the following language as a second paragraph:

It shall be unlawful for any person, firm or corporation to use a building or premises or engage in any activities for which a permit is determined to be required, by the Fire Chief, under this code, without first having obtained such permit.

- o. Section 105.1.4 is hereby added and shall read as follows:

105.1.4 Operating without a permit. Any person, company, firm, corporation or entity operating in violation of section 105.6 or 105.7 shall be subject to double permit fees. All operations and/or work shall cease until required permits are obtained and inspections completed.

- p. Section 105.2, delete and replace with the following language.

105.2 Application. Application for a permit required by this code shall be made to the fire department in such form and detail as prescribed by the Fire Chief no later than 30 days prior to date of the event. Applications for permits shall be accompanied by such plans as prescribed by the Fire Chief.

- q. Section 105.2.2, delete and replace with the following language:

105.2.2 Inspection Required. Before a new operational permit is approved, the Fire Chief shall inspect the vehicles, buildings, devices, premises, storage space or area to be used to determine compliance with this code or any operational constraints required. Before a construction permit is approved, the Fire Chief shall inspect or cause to be inspected, the permitted work to determine compliance with this code and the conditions of the permit. See section 106.

- r. Section 105.2.2.1 is hereby added to read as follows:

105.2.2.1 Inspection requests. It shall be the duty of the person doing the work authorized by a permit to notify the Fire Chief that such work is ready for inspection. The Fire Chief is authorized to require that every request for inspection be made not less than 72 hours in advance of the desired inspection date. In the case of cancellation of inspection received by 8:00 a.m. on the day of inspection, an extra fee will not be assessed.

- s. Section 105.2.2.2 is hereby added to read as follows:

105.2.2.2 Tests and inspections. Permits shall be subject to tests and inspections as required by this code and the Fire Chief. The permit fee shall include all primary tests or inspections and one re-test or re-inspection. An additional fee equal to the original permit fee or \$150.00, whichever is less, shall be paid for each additional re-test or re-inspection.

- t. Section 105.3.8 is hereby added to read as follows:

105.3.8 Operating without a permit. In addition to other remedies provided by law, any person, company, firm, corporation or entity operating in violation of section 105.1.1 shall be subject to a double permit fee. All work shall cease until the required permits are obtained and inspections completed.

It shall be unlawful for any person to continue any work after having been served with a stop work order, except such work as that person is directed to perform by the Fire Chief, in order to remove a violation or unsafe condition.

- u. Section 105.6.2, delete and replace with the following language:

105.6.2 Amusement buildings. An operational permit is required to operate a special amusement building. Plans shall be submitted to the Fire Chief and approved 30 days before the opening of the building or structure to the public.

- v. Section 105.6.3, delete and replace with the following language:

105.6.3 Aviation facilities. An operational permit is required to use a Group H or Group S occupancy for aircraft servicing or repair, the operation of aircraft fuel-servicing vehicles and to self refuel an owner-operated aircraft. Additional permits required by other sections of this code include, but are not limited to, hot work, hazardous materials and flammable or combustible finishes.

- w. Section 105.6.24 is hereby added to read as follows:

105.6.24.1 Hot work permits. Operational permits are required to be filled out by the responsible party for the site, structure, occupancy or property prior to the hot work operation. Hot work permits must be kept on file for 90 days and be made available to the Fire Chief.

- x. Section 105.6.44, delete and replace with the following language:

105.6.44 Temporary membrane structures, tents and canopies. An operational permit is required to operate an air-supported temporary

membrane structure or a tent having an area in excess of 400 square feet, or a canopy used for an occupancy in excess of 1,200 square feet.

Exception: Tents used exclusively for recreational camping purposes.

- y. Section 105.6.48 is hereby added to read as follows:

105.6.48 Trade shows and exhibits in buildings or structures. An operational permit is required to operate a trade show or exhibit in a building or structure.

- z. Section 105.7.12, delete and replace with the following language:

105.7.12 Temporary membrane structures, tents and canopies. An operational permit is required to erect an air-supported temporary membrane structure.

- aa. Section 105.7.13 is hereby added to read as follows:

105.7.13 Fire apparatus and personnel access. A permit is required:

1. To install or modify any access gate across a fire apparatus access road.
2. To modify or encroach on any fire apparatus access road.
3. To modify any personnel access points into buildings or facilities.

- bb. Section 106.2, delete and replace with the following language:

106.2 Inspections. The Fire Chief is authorized to conduct such inspections as are deemed necessary to determine the extent of compliance with the provisions of this code and to approve reports of inspection by approved agencies or individuals. All reports of such inspections shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of such approved agency or by the responsible individual. The Fire Chief is authorized to engage such expert opinion as deemed necessary to report upon unusual, detailed or complex technical issues subject to the approval of the governing body. A completed inspection shall not be construed to be an approval of a violation or to cancel the provisions of this code or of any other codes or ordinances of the City of Surprise. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid.

- cc. Section 106.3, delete and replace with the following language:

106.3 Access for inspection. All work or operations requiring a permit by this code shall be subject to inspection by the Fire Prevention Personnel and such work shall remain accessible and exposed for inspection purposes until approved in writing. It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Whenever any such work is covered or concealed without first being inspected, the Fire Chief shall have the authority to require that such work be exposed for inspection. Neither the Fire Chief nor the City of Surprise shall be liable for any expense entailed in the removal or replacement of any material to allow for inspection.

dd. Section 108.4 is hereby added to read as follows:

108.4 Administrative appeal. Whenever a violation of this code is suspected and the applicant wishes to appeal the decision of the staff because the code or the rules legally adopted thereunder have been incorrectly interpreted or an equivalent method of protection or safety is proposed, the applicant may file an appeal with the board of appeals.

ee. Section 109.2.3, delete and replace with the following language:

109.2.3 Prosecution of violations. If the notice of violation is not complied with promptly (24 hours) the Fire Chief is authorized to issue a citation, requesting the City Attorney to institute the appropriate legal proceedings at law or in equity to restrain correct or abate such violation or to require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this code or of the order or direction made pursuant thereto.

ff. Section 109.3, delete and replace with the following language:

109.3 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the Fire Chief, or of a permit or certificate used under provisions of this code, shall be guilty of a class 1 misdemeanor punishable by a fine of not more than \$2,500.00 dollars or by imprisonment not exceeding 6 months, or both such fine and imprisonment. Such fine and imprisonment shall be at the discretion of the city judge. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

4. **Chapter 2, DEFINITIONS.** Section 202, the following definitions are hereby added or amended as follows:

ATTENDANT. A person knowledgeable in the use of portable fire extinguishers, whose duty it is to maintain fire safety measures during public or private events, as prescribed.

AUTHORITY HAVING JURISDICTION. The City of Surprise Fire Chief or his designated representative.

CHIEF OF THE DIVISION OF FIRE PREVENTION. The Fire Marshal.

COMMERCIAL OCCUPANCY. Any building that falls under the International Building Code occupancy classification of A, B, E, F, H, I, M, R-1, R-2, S and U, except private garages, carports and R-3 accessory structures.

CORPORATION LEGAL COUNSEL. The City Attorney.

DEPARTMENT OF FIRE PREVENTION. The Fire Marshal's office.

DRIVE LENGTH. The measurement from the entrance of the drive to the structure.

FIRE CODE OFFICIAL. The Fire Chief or his designee.

GRADE. The degree of inclination of a slope, road or other surface (see slope).

HORIZONTAL (YARD) STANDPIPE. Approved water supply piping that extends the source of potable water to remote locations around the exterior of a structure.

HOSE LAY. The extension of a hand held fire hose as it is extended from fire apparatus 200 feet around the perimeter of the structure. If the hose lay is more than 200 feet from the road to all portions of the exterior, an Operational Platform is required.

MODIFIED (Mod.) NFPA 13D, In addition to NFPA 13D, sprinkler system protection, sprinkler heads shall be installed in enclosed patios and porches, hidden spaces, spaces under egress stairways and in garages. A one-inch domestic water meter is required.

MODIFIED (Mod.) NFPA 13R RESIDENTIAL FIRE SPRINKLER SYSTEM. In addition to NFPA 13R, sprinkler system protection, sprinkler heads shall be installed in enclosed patios and porches, hidden spaces, spaces under egress stairways and in garages. A one-inch domestic water meter is required.

OCCUPANCY CLASSIFICATION. This definition shall be amended as follows:

- a. Group I-1, delete the text of the section and replace with the following language:

Group I-1. This occupancy shall include buildings, structures, or parts thereof housing more than 10 persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a residential environment that provides supervisory care services. The occupants are capable of responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to the following:

- Residential board and care facilities
- Assisted living centers
- Halfway houses
- Group homes
- Congregate care facilities
- Social rehabilitation facilities
- Alcohol and drug abuse centers
- Convalescent facilities

A facility such as the above with 10 or fewer persons shall be classified as a Group R-4 Condition 1 or shall comply with the *International Residential Code* in accordance with Section 101.2 of the *International Building Code* where the building is in compliance with Section 419 of the *International Building Code*.”

- b. **GROUP I-2,** delete the text of the section and replace with the following language:

Group I-2. This occupancy shall include buildings or structures used for medical, surgical, psychiatric, nursing, custodial, personal or directed care on a 24-hour basis of more than five persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. This group shall include, but not be limited to the following:

- Hospitals
- Nursing Homes
- Mental hospitals
- Detoxification facilities

A facility such as the above with five or fewer persons shall be classified as Group R-3 or shall comply with the *International Residential Code*, in accordance with *International Building Code* Section 101.2.

This occupancy shall also include buildings or structures used for assisted living homes providing supervisory, personal or directed care on a 24-hour basis to more than 10 persons who are not capable of self-preservation by responding to an emergency situation without physical assistance from staff. A facility such as the above with 10 or fewer persons shall be classified as R-4 Condition 2.

- c. **GROUP R-4**, delete the text of the section and replace with the following language:

R-4 Residential occupancies shall include buildings arranged for occupancy as residential care/assisted living homes, including not more than 10 occupants, excluding staff.

Condition 1. This occupancy condition includes facilities licensed to provide supervisory care services, in which occupants are capable of self-preservation by responding to an emergency without physical assistance from staff. Condition 1 facilities housing more than 10 persons shall be classified as Group I-1.

Condition 2. This occupancy classification shall include facilities licensed to provide personal or directed care services, in which occupants are incapable of self-preservation by responding to an emergency without physical assistance from staff. Condition 2 facilities housing more than 10 persons shall be classified as Group I-2.

R-4 occupancies shall meet the requirements for construction as defined in Group R-3 except as otherwise provided for in this code, and *International Building Code* Section 419, or shall comply with the *International Residential Code*, in accordance with *International Building Code* Section 101.2, where the building is in compliance with *International Building Code* Section 419.

OPERATIONAL PLATFORM. An area located on site where the emergency vehicle is staged while performing emergency medical or fire fighting operations. The platform shall be 20 feet by 30 feet with a maximum cross grade of 5 percent. Operational platforms are required when a drive or adjacent street grade is greater than 12% slope or the hose

lay from the truck staging area to all portions of the exterior of the structure are greater than 200 feet, or when required access to structures becomes an issue.

PAVED SURFACE. A surface of concrete, asphalt, pavers, or other material designed to support fire apparatus in excess of 75,000 pounds GVW under any weather condition.

PERMENANT ALL WEATHER SURFACE (PAWS). A road surface made up of approved materials compacted to 90% with side containment, and capable of supporting fire apparatus vehicles in excess of 75,000 pound gross vehicle weight (GVW) under any weather condition. The permanent all weather surface shall be maintained by the property owner for intended use by the fire department.

SLOPE. The ground, road or other surface that forms a natural or artificial incline. The percentage of slope is determined by dividing the rise by the horizontal run multiplied by 100 [% slope = (Rise/Run) X 100].

STREET VALVE. An ON/OFF valve located in the street used to control the flow of water to a fire hydrant.

TEMPORARY ALL WEATHER SURFACE (TAWS). A road surface made up of approved materials compacted to 90% and capable of supporting fire apparatus vehicles in excess of 75,000 pound gross vehicle weight (GVW) under any weather condition. The temporary all weather surface shall be maintained by the builder for intended use by the fire department during the construction process.

TURNING RADII. 2003 AASHTO WB-50 Scale.

UNLAWFUL. A violation of this code, which may be punished by a civil penalty or a criminal penalty, however no person may be punished for the same offense by both a civil and criminal penalty.

5. **Chapter 3, GENERAL PRECAUTIONS AGAINST FIRE**

- a. Section 308.3.1, delete and replace with the following language:

308.3.1 Open-flame cooking devices. All Charcoal burners, LP gas burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction.

Exceptions: One- and two-family dwellings.

b. Section 308.3.1.1, delete.

c. Section 308.3.6.1 is hereby added to read as follows:

308.3.6.1 Audience control. The audience shall be at least 30 feet away from the closest projection of an open flame device. Audience control shall be established by use of a physical barrier which can be easily moved or removed in the event of an emergency and shall remain in place throughout the entire performance.

d. Section 308.3.6.2 is hereby added to read as follows:

308.3.6.2 Attendant. Flame Effects before an Audience. Performances shall be attended by a person knowledgeable in the proper use of fire extinguishers. Each attendant will watch over no more than two (2) active flame devices. Attendants shall remain at the performance until all flames are extinguished and attendant is dismissed.

e. Section 308.3.6.3 is hereby added to read as follows:

308.3.6.3 Fire extinguishers. Approved fire extinguishing equipment shall be readily available for use during the performance. Portable fire extinguishers shall be provided at a minimum of one 20BC fire extinguisher for every 4 simultaneous devices.

f. Section 308.3.6.4 is hereby added to read as follows:

308.3.6.4 Clearance from combustibles. A 30-foot clearance from all combustibles shall be maintained in all directions.

g. Section 308.6 is hereby added to read as follows:

308.6 Flaming food and beverage preparation. The preparation of flaming foods or beverages in places of assembly and drinking or dining establishments shall be in accordance with Section 308.6.1 through 308.6.5.

h. Section 308.6.1 is hereby added to read as follows:

308.6.1 Dispensing. Flammable or combustible liquids used in the preparation of flaming foods or beverages shall be dispensed from one of the following:

1. A one (1) ounce (29.6 ml) container or

2. A container not exceeding one (1) quart (946.5 ml) capacity with a controlled-pouring device that will limit the flow to a one (1) ounce (29.6 ml) serving.

i. Section 308.6.2 is hereby added to read as follows:

308.6.2 Containers not in use. Containers shall be secured in an approved manner to prevent spillage when not in use.

j. Section 311.2.2, delete the Exceptions.

k. Section 313.1, add “or Section 314” to the end of Exception #2.

l. Add Section 316 – HEAT-PRODUCING APPLIANCES

m. Section 316.1 is hereby added to read as follows:

316.1 General. Heating appliances shall be installed and maintained in accordance with their listing and the Building, Electrical and Mechanical codes. Clearance from combustible material shall be maintained as set forth in the Building and Mechanical codes and the product listing.

n. Section 316.2 is hereby added to read as follows:

316.2 Clothes dryers. Lint traps on clothes dryers shall be inspected as often as necessary in order to prevent excessive accumulations of lint build-up.

Exception: Clothes dryers within private dwelling units of Group R Occupancies.

6. **Chapter 4, EMERGENCY PLANNING AND PREPAREDNESS**

a. Section 403.1, add the following language as a second paragraph:

There shall be trained crowd managers or crowd manager supervisors at a ratio of one crowd manager/supervisor for every 250 occupants, unless otherwise approved by the Fire Chief.

7. **Chapter 5, FIRE SERVICE FEATURES**

a. Section 501.3, delete and replace with the following language:

501.3 Construction documents. Construction documents requiring a Fire Department Permit shall include, but not be limited to proposed fire apparatus access, location of fire lanes, means of egress, fire flow testing,

hydraulic calculations for fire hydrants and fire protection systems, alarm systems, hazardous occupancies & hazardous materials, interior finishes, smoke control systems, and construction documents specifying interior finish and fire resistance rated construction shall be submitted to the Fire Chief for review and approval prior to construction. The Site Plan shall show all fire hydrants, Fire Department Connections and related underground piping. Upon completion of construction and prior to issuance of a Certificate of Occupancy, a copy of finished drawings (As Built) shall be provided to the fire department in an electronic format, acceptable by the Fire Chief.

- b. Section 503.1.1, delete and replace with the following language:

503.1.1 Buildings and facilities. Approved fire apparatus access roads shall be provided for every facility, building or portion of a building hereafter constructed or moved into or within the jurisdiction. The fire apparatus access road shall comply with the requirements of this section and shall extend to:

1. Within 150 feet (45 720 mm) of all portions of the facility or all portions of the exterior walls of the first story of the building as measured by an approved route around the exterior of the building or facility.
2. Within 150 feet of the center of the furthest room on the second floor or level from the access road for buildings with two or more floors. Travel shall be measured along normal pedestrian routes. Stairs shall count as 30 feet.

Exceptions: The Fire Chief is authorized to increase the dimension of 150 feet (45 720 mm) where:

1. Fire apparatus access roads cannot be installed due to location on property, topography, waterways, non-negotiable grades or other similar conditions, and an approved alternative means of fire protection is provided.
2. There are not more than two Group R-3 or Group U occupancies.

- c. Section 503.2.4, add to following language:

503.2.4 Turning radii. The required turning radius for fire access roadways shall be in accordance with 2003 AASHTO WB-50 Scale.

- d. Section 503.2.5, delete and replace with the following language:

503.2.5 Dead end fire apparatus access. Dead end fire apparatus access

roads in excess of 150 feet (45 720 mm) in length shall be provided with an approved area for turning fire apparatus around. Dead-end fire apparatus access roads located between buildings shall have a 10-foot setback from the edge of the access road to the structures on each side of the road.

- e. Section 503.3, delete and replace with the following language:

503.3 Marking. Where required by the Fire Chief, approved signs with red curb markings or other approved notices shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Signs, notices and red curb markings shall be maintained in a clean and legible condition at all times, and be replaced or repaired when necessary to provide adequate visibility.

In lieu of signs, the top and face of curb shall be painted red and marked "NO PARKING FIRE LANE" in 4 inch white block letters on the top and vertical face of the curb and spaced 80 feet on center.

- f. 503.3.1 is hereby added to read as follows:

503.3.1 Maintenance. The person(s) in possession of the premises on and into which a fire apparatus access roadway is required shall be solely responsible for the maintenance of such roadways and all required signs. No owner, manager or other person(s) in charge of premises served by a required fire apparatus access roadway shall abandon or close the fire apparatus roadway or any part thereof without permission of the Fire Chief. The person(s) in possession of the premises shall be responsible for ensuring that fire apparatus roadways are clear at all times.

- g. Section 503.4, delete and replace with the following language:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. For the purposes of this section, parking is defined as stopped vehicles with no driver occupying the driver's position. Other occupants of the vehicle do not count as the driver. The minimum widths and clearances established in Section 503.2.1 shall be maintained at all times. The person in possession of the premises shall be responsible to ensure that fire apparatus access roadways are unobstructed at all times.

- h. Section 503.6, delete and replace with the following language:

503.6 Security gates. Separate FD Permit required. Plans to install security gates across fire apparatus access roads shall be submitted to the Fire Chief for review. When security gates are approved all means of emergency operation shall be provided and maintained.

Gates across fire apparatus access roads at gated communities and where required by the Fire Chief shall be electronic and shall be provided with approved preemption equipment, controls, electronic knox key switch and manual release mechanism.

Existing gates at main entry points to gated communities shall upgrade the gates to include preemption equipment within one year of the effective date of this code.

Exception: When the gate is removed from the entry point.

- i. 503.6.1 is hereby added to read as follows:

503.6.1 Clear width. Clear width of the roadway shall be minimum of 20 feet clear width at all entrances. Exit roadways shall be a minimum of 16 feet clear width at all exits, unless otherwise approved by the Fire Chief.

- j. 503.6.2 is hereby added to read as follows:

503.6.2 Divided entrance. Sub-Divisions may have a divided entrance and exit. The entrance side shall have a clearance of 20 feet clear width, the exit side shall have a 16 feet clear width. Gates shall be sized to match the opening.

- k. 503.6.3 is hereby added to read as follows:

503.6.3 Gates. Gates shall be designed so that the access roadway or turning radius (WB50) shall not be obstructed by the operation of the gate. Minimum set back from the public streets shall be a distance determined by the City Engineer and allow the emergency vehicle the ability to safely operate the lock box or panel. Turning radius from the public street shall be WB50.

- l. 503.6.4 is hereby added to read as follows:

503.6.4 Access controls. Access controls shall be exterior to the gate and located for activation by the vehicle operator without leaving the vehicle. The height of the lock box/control panel shall be 66 inches, measured from the finished grade line of the street.

- m. 503.6.5 is hereby added to read as follows:

503.6.5 Knox box. The lock box (Knox Box) padlock or key switch, must be an approved model utilized by the Fire Department. Authorized Knox

Box forms are available at 12425 W. Bell Road, City of Surprise Fire Prevention Office, Monday through Friday 8:00 am to 5:00 pm.

- n. 503.6.6 is hereby added to read as follows:

503.6.6 Traffic preemption. Traffic Preemption opening devices (TOMAR) shall be installed on all motorized gates and gated communities that secure private streets or roadways.

- o. 503.6.7 is hereby added to read as follows:

503.6.7 Gate timing. Gates must fully open within 15 seconds of activation and remain in the open position until closed by operation of the electrical control device.

- p. 503.6.8 is hereby added to read as follows:

503.6.8 Control pedestal. The control pedestal must be identified with a minimum 6-inch by 10-inch sign with red letters on a white background. This sign must be securely fastened to the pedestal and legible from the approaching vehicle. Fire Department access gates shall fail safe (open) in the event of a power failure.

- q. 503.6.9 is hereby added to read as follows:

503.6.9 Secondary access. Secondary "Exit Only" gates shall be set up for Fire Department emergency access. Exit only gates, which are not motorized, shall be installed per the fire department standard detail. Exit Only Gates shall have a minimum clearance of 20 feet clear width and be posted with a sign that states "Caution Gate Opens Out." The ground shall be painted with a 5 inch yellow strip showing the depth of the gate swing.

- r. 503.6.10 is hereby added to read as follows:

503.6.10 Pre-emption device. Operation of the gate shall be by pre-emption device and/or key-switch.

- s. Section 503.7 is hereby added to read as follows:

503.7 Graphic directories. Approved graphic directories shall be provided at all driveway entrances for all multiple dwelling developments, mobile home parks, or when required by the Fire Chief. Such directories shall be illuminated and conform to the City of Surprise design standards, and be approved by the Fire Chief.

Existing facilities shall provide illuminated graphic directories within one

year of the effective date of this code.

- t. Section 503.8 is hereby added to read as follows:

503.8 Fire station and hydrant access. It is unlawful to cause any obstruction to be placed within 10 feet of the entrance to any fire station or other place where fire apparatus is stored or with 15 feet of any fire hydrants.

- u. Section 505.1, delete and replace with the following language:

505.1 Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position so that the number is plainly legible and visible from the street or road fronting the property.

Commercial and Residential address numbers shall be located on the building at a point closest to the street as approved by the Fire Chief.

Commercial address numbers shall be Black in color, tenant space numbers or letters shall be in contrasting color, 4 inches in height, 1 inch in width, and shall be displayed above the front door and on rear door so that the number is plainly legible and visible from the street or road fronting the property. See Table 1 for commercial building addressing.

Table 1 Commercial addressing

| |
|--|
| 0 to 50 feet, numbers shall be 9 inches in height, 2-inches in width. |
| 51 to 100 feet, numbers shall be 12 inches in height, 3-inches in width. |
| 101 feet or more, numbers shall be 15 inches in height, 4-inches in width. |

Residential numbers shall be located on the residence in a contrasting color and shall be 4 inches in height, ½ inch in width, and shall be displayed on front and rear access doors so that the number is plainly legible and visible from the street or road fronting the property.

Residential (one and two family units) numbers shall be located on the residence at the closest point to the roadway so that the number is plainly legible and visible from the street or road fronting the property.

Residential (Multi-family units) Apartment numbers shall be color contrasting and located on the unit at the closest point to the roadway so that the number is plainly legible and visible from the street or road fronting the property. See Table 2 for residential application.

Table 2 Residential Multi-family Addressing

| |
|--|
| 0 to 50 feet, numbers shall be 4 inches in height. |
| More than 50 feet numbers shall be 6 inches in height. |

Apartment Numbers & Corridor Numbers. Apartment numbers are to be a minimum seven (7) inches in height with a one (1) inch brush stroke with contrasting background. Corridor numbers are to be a minimum of four (4) inches in height with a five-eighth (5/8) inch brush stroke with contrasting background. See Table 2.1 for example.

Table 2.1

| | |
|-----------|-----------------------|
| 301 – 310 | 3 rd Floor |
| 201 – 210 | 2 nd Floor |
| 101 – 110 | 1 st Floor |

- v. Section 506.1.2 is hereby added to read as follows:

506.1.2 Location. More than one recessed key box may be required for a commercial structure. A full set of keys to open all doors inside and outside the structure, to include the fire alarm panel, shall be labeled for use and placed inside the key box. Key boxes shall be mounted no higher than 60 inches above finished grade. Key boxes shall be located on the left side of the entrance, or as approved by the Fire Chief.

- w. Section 508.1, delete and replace with the following language:

508.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises upon which facilities, building or portions of buildings are hereafter constructed or moved into or within the jurisdiction. Where property is subdivided with or without the creation of public or private streets for the express purpose of providing said subdivided parcels for sale or otherwise permitting separate and/or individual development to occur, an approved water supply capable of supplying the projected fire flow for fire protection shall be provided and extended to serve directly any and all subdivided properties. The projected fire flow will be based on the greatest potential demand posed by any type of occupancy allowed by zoning laws on the proposed property.

- x. Section 508.4, delete and replace with the following language:

508.4 Water supply test. Separate FD Permit required. The Fire Chief shall be notified prior to the water supply test. Water supply tests shall be

witnessed and approved by the Fire Chief prior to final approval of the water supply system and issuance of building permits, unless otherwise approved by the Fire Chief.

- y. Section 508.4.1 is hereby added to read as follows:

508.4.1 Performed by. Water tests shall be performed by a registered AZ Professional Engineer, AZ NICET Level III, or Codes & Standards Assessment qualified personnel. Detailed test result data shall be provided to the fire department in an electronic format, acceptable by the Fire Chief.

- z. Section 508.4.2 is hereby added to read as follows:

508.4.2 Certificate of occupancy. Certificate of occupancy for any structure shall not be issued prior to final approval of the water supply system by the Fire Chief.

- aa. Section 508.5.1, delete and replace with the following language:

508.5.1 Where required. Where the most remote portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, as measured by fire apparatus driving around the exterior of the facility or building, on-site fire hydrants and mains capable of supplying the required fire flow shall be provided where required by the Fire Chief.

Exception: For Group R-3 and Group U Occupancies, the distance requirement shall be 500 feet (122m).

- bb. Section 508.5.2, delete and replace with the following language:

508.5.2 Inspection, testing and maintenance. Fire hydrant systems shall be subject to periodic tests as required by the Fire Code Official. Fire hydrant systems shall be maintained in an operative condition at all times and shall be promptly repaired where defective.

The Fire Chief shall approve all additions, repairs, alterations and servicing of water supply and fire hydrants systems.

- cc. Section 508.5.2.1 is hereby added to read as follows:

508.5.2.1 Required installations. Fire hydrants installed as a result of any order or permit shall be spaced so that short hose lines can be utilized and so there are a sufficient number of fire hydrants within a reasonable distance to obtain the required fire flow as determined using Appendix B. In other than single-family residential areas, hydrants shall be spaced so

that they are not more than 300 feet (91.5m) apart. For one- and two-family dwellings, hydrants shall be spaced so that they are not more than 500 feet (152.5m) apart and not more than 400 feet (122m) hose lay from the center of any structure. Hydrant spacing and hose lay requirements may be modified by the Fire Chief.

Private Fire Hydrants. All private fire hydrants (those not on the City of Surprise water system and/or located on private property) must be flushed and maintained annually in accordance with the American Water Works Association, Manual of Water Supply Practices, Installation Field Testing and Maintenance of Fire hydrants, AWWA M17. Selected hydrants, as determined by the Fire Chief, shall be tested to determine Available Fire Flow according to test procedures outlined in the American Water Works Association Manual of Water Supply Practices, Distribution System Requirements for Fire Protection, AWWA M31. Results of the testing shall be provided in an electronic format, acceptable to the Fire Chief.

Public Fire Hydrants. All public fire hydrants must be flushed and maintained annually in accordance with the American Water Works Association, Manual of Water Supply Practices, Installation Field Testing and Maintenance of Fire hydrants, AWWA M17. Selected hydrants, as determined by the Fire Chief, shall be tested to determine Available Fire Flow according to test procedures outlined in the American Water Works Association Manual of Water Supply Practices, Distribution System Requirements for Fire Protection, AWWA M31. Results of the testing shall be provided to the fire department in an electronic format, acceptable to the Fire Chief.

Fire Hydrants. All fire hydrants shall be in accordance with MAG standards for Dry Barrel Fire Hydrants, as defined by AWWA M17 and specified by the City of Surprise Water Services Department and Engineering Department. Fire Hydrants used in all applications shall have 2 to 2 ½ inch outlets and 1-to 4-½ inch outlet. All outlets shall have National Standard Threads (NST).

dd. Section 508.5.3, delete and replace with the following language:

508.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with NFPA 25, National Electrical Code, 2002 Edition, at the following intervals:

1. Private fire hydrants (all types): Inspection annually and after each operation; flow test and service annually.
2. Fire service main piping: Inspection of exposed, annually; flow test every five (5) years.

3. Fire service main piping strainers: Inspection and maintenance after each use.
4. Fire hydrant systems. Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to construction. Plans and specifications for fire hydrant systems shall be submitted to the fire department for review and approval prior to City Council action on the final subdivision plat, or in the case of an individual building or structure, for review and approval prior to issuance of the building permit. The Fire Chief shall obtain the approval of the Engineering Department on the submitted plans and specifications.
5. Water service providers, whether municipal or private, shall submit a map identifying the location of fire hydrants within the service area of the water provider. The map required under this subsection shall be submitted on or before December 31, of each year, and shall be updated by the water service provider as new fire hydrants are installed. On May 31, of each subsequent year, a map identifying the location of the fire hydrants within the service area of the water provider shall be submitted to the Fire Chief. In the event a water service provider fails to submit the map required under subsection 5 of this section, the Fire Chief is authorized to prepare a map of the fire hydrant locations within the service area of water service provider, and charge the cost of preparation of the map to the water service provider, together with an administrative fee equal to 15 percent of the cost of preparation of the map.

A water service provider, whether municipal or private, having a portion of its service area in which no distribution or service lines are located, shall identify such areas on the map required by this subsection. Such areas shall be exempt from the requirements of Sections 508.1 through 508.4 and Appendix B and C until distribution or service lines are installed by the water service provider.

6. On or before December 31, of each year, each water service provider, whether municipal or private shall have prepared and filed with the fire department, a plan that:
 - a. Indicates sufficient hydrants on all streets within its water service area containing water utility distribution or service lines to comply with the requirements of International Fire Code, Appendix C-Fire Hydrant Locations and Distribution, including but not limited to Table C105.1 or
 - b. A five year Capital Improvement Plan indicating plans for the construction of sufficient hydrants on all streets within its water service area containing water utility distribution or service lines to comply with the requirements of 2003

International Fire Code, Appendix C- Fire Hydrant Locations and Distribution, including but not limited to Table C105.1 within five (5) years from the date of submission of the plan.

On or before January 10, of each year following submission of the plan, the Fire Chief shall file with the City Clerk, the Directors of Community Development, Water Services Dept., Engineering Dept. and the applicable water provider, a written notice indicating each water service provider who is not in compliance with the requirements of subsection 5 of this section. Upon filing of the written notice with the City Clerk, no building permit shall be issued within the service area of a water service provider who is not in compliance with the requirements of subsection 5 of this section.

A water service provider that believes a notice has been improperly issued under this section, may appeal the issuance of the notice to the City Manager, by filling a written notice of appeal to the City Manager within ten (10) days after filing of the Notice in subsection (6) with the City Clerk. The City Manager or his/her designee shall hold a hearing on the appeal within thirty (30) days after filing of the appeal.

ee. Add Section 511 – FIRE FIGHTER AIR SYSTEMS

ff. Section 511.1 is hereby added to read as follows:

511.1 Fire fighters air systems. All buildings having floors used for human occupancy located 5 stories or more above or below the lowest level of fire department vehicular access shall be equipped with an approved rescue air replenishment system, or any other occupancy as required by the fire department. Such system shall provide an adequate pressurized air supply through permanent piping system for the replenishment of self contained breathing apparatus carried by fire suppression, rescue and other personnel in the performance of their duties. Location and specification of access stations, and the installation of such air replenishment system shall be made in accordance with the requirements and standards of the fire department.

gg. Add Section 512 - PUBLIC SAFETY RADIO AMPLIFICATION SYSTEM

hh. Section 512.1 is hereby added to read as follows:

512.1 Purpose. The purpose of this article is to provide minimum standards to insure a reasonable degree of reliability for emergency services communications from within certain buildings and structures within the City to and from emergency communications centers. It is the responsibility of the emergency service provider to get the signal to and from the building site.

- ii. Section 512.2 is hereby added to read as follows:

512.2 Scope. The provisions of this article shall apply to new buildings and structures of construction greater than 50,000 square feet or if modifications are made within any 12 month period and exceed 50% of the value of the existing building(s) or structure(s), or the use of the property is expanded or enlarged by 50%, which have not received a final inspection prior to the adoption of these provisions; and all basements or sub-level parking structures over 10,000 square feet where the design occupant load is greater than 50, regardless of the occupancy. For the purpose of this section, area separation walls cannot be used to define separate buildings.

- jj. Section 512.3 is hereby added to read as follows:

512.3 Radio coverage. Except as otherwise provided in this article, no person shall erect construct or modify any building or structure or any part thereof, or cause the same to be done which fails to support adequate radio coverage for firefighters and police officers. A final inspection shall not be approved for any building or structure that fails to comply with this requirement.

- kk. Section 512.4 is hereby added to read as follows:

512.4 Telecommunications. The City's telecommunications unit with consideration of the appropriate police, fire and emergency medical department services, at the time the building permit is issued, shall determine the frequency range or ranges that must be supported. For the purpose of this section, adequate radio coverage shall constitute a successful communications test between the building and the communications centers for all appropriate emergency service providers for the building.

8. **Chapter 6, BUILDING SERVICES AND SYSTEMS**

- a. Section 605.10 is hereby added to read as follows:

605.10 electrical service shut off access. Where electrical service shut off controls are located inside a building, a door providing direct access from the exterior to the room containing such electrical shut off controls shall be

provided, when required by the Fire Chief.

9. **Chapter 8, INTERIOR FINISH, DECORATIVE MATERIALS AND FURNISHINGS**

- a. Section 803.3.1, delete Exceptions # 1 and # 2.
- b. Section 803.4.1, delete Exceptions # 1 and # 2.

10. **Chapter 9, FIRE PROTECTION SYSTEMS**

- a. Section 901.2.1, delete and replace with the following language:

907.2.1. Plans for fire sprinkler systems. Complete plans and hydraulic calculations for fire sprinkler system installation shall be submitted for review and approval prior to installation, modification or alteration. Plans shall be drawn to an indicated scale, on sheets of uniform size and shall show, as a minimum, the data required by NFPA 13, 2002 Edition, Chapter 6. Manufacturer's cut sheets for all equipment used shall be included with the original submittal. Water supply data for hydraulic calculations shall be based on 90 percent of the available water supply as determined by flow test information. An additional copy of these plans shall be submitted in an electronic format suitable to the Fire Chief. Unless otherwise required by the Fire Chief, deferred plan submittals may be acceptable. Request for plan deferral can be obtained at the Fire Department Permit Tech counter located in the Community Development Department.

- b. Section 901.2.2 is hereby added to read as follows:

901.2.2 Plan submittals. Plan submittals shall be in accordance with the standard plan review format as provided by the Arizona Automatic Fire Alarm Association. Shop drawings shall accompany construction documents at the time of initial submittal. Unless otherwise required by the Fire Chief, deferred plan submittals may be acceptable. Request for deferral can be obtained at the Fire Department Permit Tech counter located in the Community Development Department.

- c. Section 901.2.3 is hereby added to read as follows:

901.2.3 Plan certifications for fire sprinklers. All fire sprinkler plans submitted to the fire department for review and approval shall bear a review certification stamp and signature of an AZ Professional Design Registrant or Level III National Institute for the Certification of Engineering Technologies (NICET) in fire sprinkler systems.

- d. Section 901.2.4 is hereby added to read as follows:

901.2.4 Plan certification for all other fire protection systems. Plan certification for all other fire protection systems shall be accompanied by a certification of competence when required. Shop drawings for all other fire protection systems shall accompany construction documents at the time of initial submittal. Unless otherwise required by the Fire Chief, deferred plan submittals may be acceptable. Request for deferral can be obtained from the Fire Department Permit Tech counter located in Community Development Department.

- e. Section 901.2.5 is hereby added to read as follows:

901.2.5 Plan certification for fire alarms and occupant notification. All fire alarm system plans submitted to the fire department for review and approval shall bear a review certification stamp and signature of an Arizona Professional Design Registrant or Level III National Institute for the Certification of Engineering Technologies (NICET) in Fire Alarm Systems. Plan certification for all fire alarm systems shall be accompanied by a certification of competence when required. Shop drawings shall accompany construction documents at the time of initial submittal. Unless otherwise required by the Fire Chief, deferred plan submittals may be acceptable. Request for Deferral can be obtained from the Fire Department Permit Tech located in Community Development Department.

- f. Section 901.2.6 is hereby added to read as follows:

901.2.6 On site plans, specifications and permits. Fire department approved plans, specifications and permits shall be retained on the job site, and made available to the fire inspector on each inspection.

- g. Section 901.4, delete and replace with the following language:

901.4 Installation. Fire protection systems shall be maintained in accordance with original installation standards for that system. Systems shall be extended, altered or augmented as necessary to maintain and continue protection whenever the building is altered, remodeled or added to. Alterations to fire protection systems shall be done in accordance with applicable standards.

- h. Section 901.4.1.1 is hereby added to read as follows:

901.4.1.1 Fire protection system riser. Fire protection system riser assembly shall be installed inside the building. A door providing direct access from the exterior into the room containing fire sprinkler controls shall be provided. The fire riser assembly shall be installed in accordance with NFPA 13, 2002 Edition, and be equipped with listed double horizontal

or vertical back flow prevention devices sized to match riser piping. Clearance around the fire riser and other equipment shall not be less than 36 inches. The room shall be designed and used for fire protection and fire detection equipment only.

- i. Section 901.4.1.2 is hereby added to read as follows:

901.4.1.2 Inspectors' test valve. The Inspectors' Test Valve shall be located on the end of the most distant sprinkler pipe on each story and shall be equipped with a readily accessible brass shutoff valve.

- j. Section 901.4.1.3 is hereby added to read as follows:

901.4.1.3 Horn & Strobe. Horn & Strobe (weather proof) shall be installed on the exterior wall adjacent to the fire sprinkler riser.

- k. Section 901.6.3 is hereby added to read as follows:

901.6.3 Inspection, testing and maintenance. All fire and life safety systems including but not limited to: fire extinguishers, fire alarms, water supply and fire hydrant systems, backflow prevention devices, fire sprinklers and standpipes, chemical extinguishing systems and other types of automatic fire extinguishing systems. Basement pipe inlets and other fire-protection systems and appurtenances shall be inspected, tested and maintained on an annual basis, after each use or as often as required by the Fire Chief to ensure operability by nationally recognized standards. Test records and tags shall be retained on site by the occupant of the building and a copy mailed to the Surprise Fire Department, Fire Prevention Division. These systems shall be inspected, tested and maintained by a contractor holding a Certificate of Performance Card Permit issued by the Fire Chief.

- l. Section 901.6.4 is hereby added to read as follows:

901.6.4 Performance examination. To perform work on fire and life safety systems in the City of Surprise, all contractors and/or service personnel must submit to and satisfactorily pass a performance examination. The examination will be provided by an outside agency approved by the Fire Chief. The cost of such examination shall be the responsibility of the individual(s) taking the examination. A fire department renewable fee of \$50.00 will be accessed annually.

- m. Section 901.6.5 is hereby added to read as follows:

901.6.5 Contractors. Contractors and service personnel must obtain a Certificate of Performance Card from the Surprise Fire Department prior to

working in the City of Surprise. The Fire Department will recognize a valid performance card from any Arizona jurisdiction.

- n. Section 901.7, delete and replace with the following language:

901.7 Systems out of service. Where a required fire protection system is out of service, the Fire Chief shall be notified immediately, and where required by the Fire Chief, the building shall either be evacuated or approved fire watch or standby personnel shall be provided for all occupants until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for communication with the fire department, and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

A required fire sprinkler system or fire alarm system shall not be placed out of service for more than 8 hours in any one day without written authorization by the Fire Chief.

- o. Section 901.8, delete and replace with the following language:

901.8 Tampering with fire hydrants and street valves. It shall be unlawful for any person to remove, tamper with, disturb or otherwise vandalize in any manner, any fire hydrant or street valve required by this code. Any tampering with fire hydrants and street valves without prior approval from the Fire Chief shall be a class 1 misdemeanor.

Exception: By the water provider during times of repair, service, maintenance and testing.

- P. Section 901.8.1, delete and replace with the following language:

901.8.1 Use of fire hydrants during construction. Use of fire hydrants for the purpose of site development must be approved by the Fire Chief. The contractor shall request, in writing, approval to attach appliances to fire hydrants. Fire hydrants shall be inspected prior to water-meter attachment, and during removal by the fire department.

- q. Section 903.1.1, delete and replace with the following language:

903.1.1 Commercial development. All new commercial occupancies for which a building or construction permit is obtained shall be protected by a fully automatic sprinkler system. Installation of the sprinkler system shall be in accordance with the requirements of NFPA 13, 2002 Edition, unless otherwise approved by the Fire Chief.

Existing buildings, structures and occupancies will not require retrofitting with fire sprinkler systems to meet current code standards unless:

1. Building fire resistance has decreased; or
2. Building area has increased to more than 2,500 square feet; or
3. Building occupant load has increased; or
4. Building occupancy classification has changed; or
5. Fire or other structural damage in buildings exceeding 50% of the estimated market value.

- r. Section 903.2.7.1 is hereby added to read as follows:

903.2.7.1 Group R, Division 2. All Group R Division 2 occupancies shall be required to install a Mod. NFPA 13R Residential Fire Sprinkler System. If any portion of a patio has livable space directly above the enclosed patio, the patio shall have sprinkler protection.

- s. Section 903.2.7.2 is hereby added to read as follows:

903.2.7.2 Group R, Division 4. All Group R Division 4 occupancies having assisted living residents, exclusive of the care giver and their family, or day care, shall be required to install a Mod. NFPA 13D Residential Fire Sprinkler System throughout, including attached garages. If any portion of a patio or porch has livable space directly above the patio or porch, the patio or porch shall have sprinkler protection.

- a. Such systems shall contain an electronically supervised valve located between the domestic water riser control valve and the sprinklers.
- b. In R-4 Condition 2 facilities, such systems shall include concealed spaces containing combustible materials, and shall contain water flow switches electrically supervised by an approved Central Station, and shall sound an alarm at a constantly attended location inside the facility.
- c. Minimum listed electronic components for alarms shall consist of an auto dialer and an interior horn and strobe connected to the fire riser flow switch.

- t. Section 903.2.7.3 is hereby added to read as follows:

903.2.7.3 Group R, Division 3. A Mod. NFPA 13D Residential Fire Sprinkler System shall be installed in Group R, Division 3 occupancies. If any portion of a patio or porch has livable space directly above the patio or porch, the patio or porch shall have sprinkler protection.

Exception: Residential sprinklers may be omitted from Group R, Division 3 occupancies as long as the required fire flows in accordance with Appendix B Fire-Flow Requirements For Buildings and Table B105.1 Minimum Required Fire Flow and Flow Duration For Buildings are met.

- u. Section 903.2.7.3.1 is hereby added to read as follows:

903.2.7.3.1 Group R, Division 3. Each builder, contractor or developer shall offer as an option, at the time of purchase, to each homebuyer, a residential fire sprinkler system.

- v. Section 903.2.7.3.2 is hereby added to read as follows:

903.2.7.3.2 Comparative cost. The option shall include a comparative cost for installing a modified NFPA 13D automatic fire sprinkler system. This option shall be included on the builder, contractor or developer's list of options.

- w. Section 903.2.7.3.3 is hereby added to read as follows:

903.2.7.3.3 Display an approved sample of a Mod. NFPA 13D Residential sprinkler system riser and two types of sprinkler heads (exposed and concealed). The builder, contractor or developer shall provide an approved NFPA 13D, 2002 Edition, automatic fire sprinkler system riser in the sales office of each subdivision.

- x. Section 903.2.7.3.4 is hereby added to read as follows:

903.2.7.3.4 Educational materials. The builder, contractor or developer shall provide each home-buyer a copy of educational materials prepared by the Fire Department on residential fire sprinkler systems with each model price list.

- y. Section 903.2.7.3.5 is hereby added to read as follows:

903.2.7.3.5 Affidavit. A signed affidavit by the buyer indicating that this option was offered and refused shall be retained by the developer at his home office, available for inspection by the Fire Chief for a period of one year from the time of closure of the residence. A copy of the signed affidavit shall be attached to the application for permit.

- z. Section 903.3.7 delete and replace with the following language:

903.3.7 Fire department connections. The location of Fire Department Connections shall be determined by the Fire Chief. Fire Department

Connection shall be located on the main entrance side, remote from the building, outside the collapse zone and within 25 feet of a fire hydrant.

- aa. Section 903.3.7.1 is hereby added to read as follows:

903.3.7.1 Fire department connection (FDC) piping. When a building or buildings are served by a single or multiple Fire Department Connection, the piping shall be arranged so that use of any Fire Department Connection will supply the entire building or buildings.

- bb. Section 903.3.8 is hereby added to read as follows:

903.3.8 Fire department connection (FDC) strobe. A listed electronic strobe shall be installed as part of the remote fire department connection. Wiring for the strobe shall be connected to the alarm panel and shall activate upon sprinkler system flow.

- cc. Section 903.4.1, delete Exception #2 and replace with the following language:

- 2. Backflow prevention device shutoff valves, located in the limited area sprinkler system supply piping, shall be locked in the open position. In occupancies required to be equipped with a fire alarm system, the backflow prevention valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72, 2002 Edition, and separately annunciated.

- dd. Section 906.1, delete Exception.

- ee. Section 906.2, delete Exception.

- ff. Section 907.2, delete and replace with the following language:

907.2 Where required-new buildings and structures. All new commercial occupancies for which a building or construction permit is obtained shall be protected by a fully automatic fire alarm system. Installation of the fire alarm system shall be in accordance with the requirements of NFPA 72, 2002 Edition, unless otherwise approved by the Fire Chief. All fire alarms systems shall be addressable systems with Class-A wiring. Addressable devices in tenant spaces shall include tenant address or suite number.

An approved fully automatic fire detection system shall be installed in accordance with the provisions of this code and NFPA 72, 2002 Edition,. Devices, combinations of devices, appliances and equipment shall comply with Section 907.1.2. The automatic fire detectors shall be smoke

detectors, except that an approved alternative type of detector shall be installed in spaces such as boiler rooms, utilities rooms, bathrooms and Janitor's closet with water heater and/or sink, where during normal operation, products of combustion are present in sufficient quantity to actuate a smoke detector.

gg. Section 907.2.10.1.2, add the following language to read:

4. In R-4 occupancies, in all habitable rooms.

hh. Section 907.2.10.5 is hereby added to read as follows:

907.2.10.5 Carbon monoxide detectors and ADA horns and strobes. As an option, at the time of purchase, each builder, contractor or developer of Group R, Division 3 occupancies, shall offer carbon monoxide detectors and ADA horns and strobes to homebuyers.

ii. Section 907.2.10.5.1 is hereby added to read as follows:

907.2.10.5.1 Location within the structure. ADA horns and strobes and carbon monoxide detectors shall be installed in accordance with their listing, in hallways outside of the sleeping areas and outside of furnace rooms in occupied spaces, and as approved by the Fire Chief.

jj. Section 907.2.10.5.2 is hereby added to read as follows:

907.2.10.5.2 Additions, alterations or repairs to these Occupancies. When the valuation of an addition, alteration or repair to a Group R Occupancy exceeds \$1,000.00, a permit is required; or when gas (Natural or LPG), oil, kerosene or wood burning appliance is added to the structure, a carbon monoxide detector shall be installed in accordance with Section 907.2.10.3 carbon monoxide detectors.

kk. Section 907.2.10.5.3 is hereby added to read as follows:

907.2.10.5.3 Educational materials. The builder, contractor or developer shall provide each homebuyer a copy of educational materials prepared by the Fire Chief on residential fire alarms.

ll. Section 907.2.10.5.4 is hereby added to read as follows:

907.2.10.5.4 Affidavit. A signed affidavit by the buyer indicating that this option was offered shall be retained by the developer at his home office, available for inspection by the Fire Chief for a period of one year from the time of closure of the residence.

- mm. Section 907.4.1, delete the Exception and replace with the following language:

Exception: Unless otherwise required by the Fire Chief, manual fire alarm boxes shall not be required in occupancies where the building is equipped throughout with an approved automatic sprinkler system, the notification appliances will activate on sprinkler water flow.

- nn. Section 907.15 delete and replace with the following language:

907.15 Monitoring. All supervised fire alarm systems and fire protection systems shall be monitored by a listed full service Central Station, providing all services in accordance with NFPA 72-8.2.2, 2002 Edition. Third party testing shall be required per NFPA 72-8.2.4, 2002 Edition, and documentation shall be provided to the fire department in a format, acceptable to the Fire Chief.

- oo. Section 912.4, delete and replace with the following language:

912.4 Signs. A metal sign with raised letters at least 1 inch (25 mm) in size shall be mounted on all Fire Department Connections serving fire sprinklers or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable.

When a building is served by multiple Fire Department Connections, each connection shall be provided with an approved sign detailing the area of the building served by each connection.

- pp. Section 912.5, delete and replace with the following language:

912.5 Backflow protection. The potable water supply to automatic sprinkler and standpipe systems shall be protected against backflow as required by the water service providers. Backflow devices shall be installed, inspected, tested and maintained in accordance with NFPA 13 and NFPA 25, 2002 Edition. Results of the testing shall be provided to the fire department in an electronic format, acceptable to the Fire Chief.

11. Chapter 10, MEANS OF EGRESS

- a. Section 1008.1.2, revise exception #3 to read as follows:
 - 3. Doors within or serving a single dwelling unit in Groups R-2, R-3 and R-4 as applicable... (no other changes)

- b. Section 1008.1.8.6, delete exception #3 and replace with the following language:

- 3. The door locks shall have the capability of being unlocked by a signal from the fire command center, except R-4 Condition 2 occupancies.

- c. Section 1025.2, revise exceptions #1 and #2 to read:

- 1. In other than R-3 and R-4 occupancies... (no other changes)

- 2. In other than R-3 and R-4 occupancies... (no other changes)

- d. Section 1008.1.9, delete and replace with the following language:

1008.1.9 Panic and fire exit hardware. Where panic and fire exit hardware is installed, it shall comply with the following:

- 1. The actuating portion of the releasing device shall extend at least one-half of the door leaf width.
 - 2. The maximum unlatching force shall not exceed 15 pounds (67 N).

Each door in a means of egress from a Group A or E occupancy, having an occupant load of 50 or more, and any Group H occupancy shall not be provided with a latch or lock unless it is panic hardware or fire exit hardware.

If balanced doors are used and panic hardware is required, the panic hardware shall be the push-pad type and the pad shall not extend more than one-half the width of the door measured from the latch side.

- e. Section 1025.2, revise exceptions #1 and #2 to read:

- a. In other than R-3 and R-4 occupancies... (no other changes)

12. **Chapter 14, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION**

- a. Section 1410.3 is hereby added and shall read as follows:

1410.3 Access road signs. During construction, approved signs shall be located to direct emergency responders into and through the construction site.

13. **Chapter 22, MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES**

- a. Section 2208.3.2 is hereby added to read as follows:

2208.3.2 Vehicle impact protection. Vehicle impact protection for CNG gas storage containers, pumps and dispensers shall be provided in accordance with Section 2206.4. In other than R-3 and R-4 occupancies... (no other changes)

14. **Chapter 26, WELDING AND OTHER HOT WORK**

- a. Section 2604.2.6, delete and replace with the following language:

2604.2.6 Fire extinguisher. A minimum of one portable fire extinguisher, complying with Section 906 and with a minimum 2-A:20-B:C rating, shall be readily accessible within 30 feet (9144 mm) of the location where hot work is performed and shall be accessible without climbing stairs or ladders.

- b. Section 2604.2.6.1 is hereby added to read as follows:

2604.2.6.1 Fire Extinguisher Omission. Fire extinguishers may be omitted as approved by the Fire Chief.

15. **Chapter 27, HAZARDOUS MATERIALS**

- a. Section 2701.5, delete and replace with the following language:

2701.5 Permits. Permits shall be required as set forth in Sections 105.6 and 105.7.

When required by the Fire Chief, permittees shall apply for approval to permanently close a storage, use or handling facility. Such application shall be submitted at least 30 days prior to the termination of the storage, use or handling of hazardous materials. The Fire Chief is authorized to require that the application be accompanied by an approved facility closure plan in accordance with Section 2701.5.3.

- b. Section 2701.5.1 is hereby added to read as follows:

2701.5.1 Hazardous materials management plan. When required by the Fire Chief, each application for a permit shall include a Hazardous Materials Management Plan (HMMP). The HMMP shall include a facility site plan and include the information set forth below.

HMMP shall be submitted annually, or more often if the hazardous material amounts change by greater than 10% in any single category or

overall. HMMP shall be submitted electronically in a format acceptable to the Fire Chief. The submittal shall be required to determine Fire Code Permitting criteria for storage, use and/or handling of hazardous materials within the City of Surprise. Any electronic submittal is acceptable as long as the data will import or interface with the software program currently being used by the fire department. Electronic reporting shall be required for all new and existing facilities upon permit renewal.

The data submitted shall include the following:

1. Storage and use areas.
2. Maximum amount of each material stored or used in each area.
3. Range of container sizes
4. Locations of emergency isolation and mitigation valves and devices.
5. Product conveying piping containing liquids or gases, other than utility-owned fuel gas lines and low-pressure fuel gas lines.
6. ON-OFF positions of valves for valves that are of the self-indicating type.
7. Storage plan showing the intended storage arrangement, including the location and dimensions of aisles.
8. The location and type of emergency equipment.
9. The plans shall be legible and drawn approximately to scale. Separate distribution systems are allowed to be shown on separate pages.

- c. Section 2701.5.2, delete and replace with the following language:

2701.5.2 Hazardous materials inventory statement (HMIS). Where required by the Fire Chief, an application for a permit shall include an HMIS, such as SARA (Superfund Amendments and Reauthorization Act of 1986) Title III, Tier II Report or other approved statement. The HMIS shall include the information set forth below.

An HMIS shall be submitted annually, or more often if the hazardous material amounts change by greater than 10% in any single category or overall. HMIS shall be submitted electronically in a format acceptable to the Surprise Fire Chief. The submittal shall be required to determine Fire Code Permitting criteria for storage, use and/or handling of hazardous materials within the City of Surprise. Any electronic submittal is acceptable as long as the data will import or interface with the software program currently being used by the Fire Chief. Electronic reporting shall be required for all new and existing facilities upon permit renewal.

The data submitted shall include the following:

1. Manufacturer's name.
2. Chemical name, trade names, hazardous ingredients.
3. Hazard classification.
4. MSDS or equivalent.
5. United Nations (UN), North America (NA) or the Chemical Abstract Service identification number.
6. Maximum quantity stored or used on site at one time.
7. Storage conditions related to the storage type, temperature and pressure.

d. Section 2702.1, add the following definitions:

Group 0: No Hazardous Materials on site .

Group 1: Special information is required to be submitted by any facility that has quantities of chemicals greater than the permitted quantities as listed in the International Fire Code, but less than the following:

- a. 55 gallons of a liquid
- b. 500 pounds of a solid
- c. 200 cubic feet of a gas
- d. 2,500 pounds of an aerosol product.

Special Information that must be submitted shall include:

- a. A hazardous materials classification form.
- b. A hazardous materials inventory statement (HMIS).

Group 2: Special information is required to be submitted by any facility that has quantities of chemicals on site greater than the following but less than the exempt amounts, as determined by the International Fire Code:

- a. 55 gallons of a liquid.
- b. 500 pounds of a solid.
- c. 200 cubic feet of a gas.
- d. 2,500 pounds of an aerosol product.

Special information that must be submitted shall include:

- a. A hazardous materials classification form.
- b. A hazardous materials inventory statement (HMIS).
- c. A hazardous materials storage plan.

Group 3: Special information comprised of a Hazardous Materials Management Plan (HMMP) shall be submitted whenever:

- a. Hazardous Materials exceed exempt amounts specified in IFC.
 - b. IFC requires detached storage.
 - c. The building or site has multiple International Building Code Group H occupancy classifications.
 - d. The facility is a Group H-5 semiconductor facility.
 - e. SARA Title III extremely hazardous substance is used, handled or stored on site in quantities requiring an IFC permit and which are above threshold planning quantities.
 - f. When otherwise determined necessary by the Fire Marshal because of unique circumstances.
- e. Section 2703.5, delete and replace with the following language:

2703.5 Hazardous identification signs. Unless otherwise exempted by the Fire Chief, visible hazardous identification signs as specified in NFPA 704, 2002 Edition, for the specific material contained shall be placed on stationary containers and above ground tanks and at all entrances to locations where hazardous materials are stored, dispensed, used or handled in quantities requiring a permit or as required by the Fire Chief, and at specific entrances and locations designated by the Fire Chief.

14. **Chapter 32, CRYOGENIC FLUIDS**

- a. Section 3204.3.1.1 is hereby amended to read as follows:

3204.3.1.1 Location. Stationary containers shall be located in accordance with Section 3203.6. Containers of cryogenic fluids shall not be located within diked areas containing other hazardous materials. Storage of flammable cryogenic fluids in stationary containers outside of buildings is prohibited within the limits as established by the zoning provisions in the Surprise Municipal Code.-

15. **Chapter 33, EXPLOSIVES AND FIREWORKS**

- a. Section 3308.11, delete and replace with the following language:

3308.11 Retail display and sale. It is unlawful to sell, use or possess for use consumer fireworks. Fireworks may only be possessed by a person having a valid shooters permit issued by the Fire Chief or any other Arizona fire department. Prior to entering City limits, fireworks shall be

pre-squibbed, and the Fire Inspector will escort the shooter and fireworks directly to the display site.

- a. The fire inspector and shooter or agent shall conduct a pre-site inspection.
- b. All barriers, fencing and safety measures shall be in place.
- c. The fire inspector will provide security for the display site.
- d. Others will not be allowed into the display proximity
- e. The fire inspector and shooter will inspect the display site after the shoot.
- f. Protective clothing shall be worn by all personnel inside the display proximity during the shoot.
- g. All other safety measures shall be followed for fireworks in the IFC Chapter 33 and NFPA 1123, NFPA 1124 and NFPA 1126, 2002 Edition,.

16. **Chapter 34, FLAMMABLE AND COMBUSTIBLE LIQUIDS**

- a. Section 3404.2.9.5.1, delete and replace with the following language:

3404.2.9.5.1 Locations where aboveground tanks are prohibited. Storage of Class I and II liquids in aboveground tanks outside of buildings is prohibited within the limits as established by the zoning provision in the Surprise Municipal Code.-

- b. Section 3406.2.2.4, delete and replace with the following language:

3406.2.4.4 Locations where aboveground tanks are prohibited. The storage of Class I and II liquids in aboveground tanks is prohibited within the limits as established by the zoning provision in the Surprise Municipal Code.

17. **Chapter 38, LIQUEFIED PETROLEUM GAS (LP)**

- a. Section 3803.2.1.7, delete and replace with the following language:

3803.2.1.7 Use for food preparation. Listed and approved LP-gas commercial food service appliances shall be permitted to be used inside restaurants and in commercial food catering operations that are attended. No commercial food service appliances shall have more than two 10-oz non-refillable butane gas containers with a maximum water capacity of 1.08 lb. per container connected directly to the appliance at any time. Containers shall not be manifolded. The appliance fuel container(s) shall be an integral part of the listed, approved commercial food service device and shall be connected without the use of a hose.

Butane containers shall be listed. Storage in restaurants and at food service locations of 10-oz butane non-refillable containers shall be limited to no more than twenty-four containers.

- b. Section 3804.2, delete and replace with the following language:

3804.2 Maximum capacity within established limits. Within the limits established by the zoning provision in the Surprise Municipal Code, restricting the storage of liquefied petroleum gas for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed a water capacity of 2,000 gallons (7570 L).

Exception: In particular installations, this capacity limit shall be determined by the Fire Chief, after consideration of special features such as topographical conditions, nature of occupancy, proximity to buildings, capacity of proposed containers, degree of fire protection to be provided and capabilities of the local fire department.

PASSED AND ADOPTED this 9th day of February, 2006.

Joan Shafer, Mayor

ATTEST:

APPROVED AS TO FORM:

Sherry Aguilar, City Clerk

K. Scott McCoy, City Attorney

Yeas: _____

Nays: _____